



LEENDERS

SINCE 1979

BOXER PLUS

DATASHEET

EN

NL

DE

FR

TECHNICAL DOCUMENTATION FOR SOLID FUEL LOCAL SPACE HEATERS

Manufacturer	Harrie Leenders Haardkachels B.V., Industrieweg 25, 5688 DP Oirschot, The Netherlands	General description	Freestanding solid fuel local space heater without hot water supply
Model identifier	BOXER PLUS	Specific precautions for assembly, installation or maintenance	Precautions for assembly, installation and maintenance are described in: - Installation instructions - Instructions for use & maintenance
Equivalent models	-		
Test report nr.	EZKA/11/041-3		
Harmonized European standard	EN13240:2001/A2:2004	Calculations	$EEL = (\mu S_{on} \cdot BLF) - 10\% + F(2) + F(3) - F(4) - F(5)$ $\mu S_{on} = \mu_{th, nom}$ $\eta_s = \eta_{nom} - 10\% + F(2) + F(3) - F(4) - F(5)$
Indirect heating function	No	Testing conditions	Tested according: EN13240:2001/A2:2004 CEN/TS 15883:2009/A1
Direct heat output (kW)	9,9		
Indirect heat output (kW)	-		


Fuel	Preferred fuel (only one)	Other suitable fuel(s)	Emissions at nominal heat output [mg/Nm ³ (13 % O ₂)				Emissions at minimum heat output [mg/Nm ³ (13 % O ₂)			
			PM	OGC	CO	NO _x	PM	OGC	CO	NO _x
Wood logs, moisture content < 25 %	Yes	No	31	42	688	105	N/A	N/A	N/A	N/A
Compressed wood, moisture content < 12 %	No	Yes	31	42	688	105	N/A	N/A	N/A	N/A
Other woody biomass	No	No								
Non-woody biomass	No	No								
Anthracite and dry steam coal	No	No								
Hard coke	No	No								
Low temperature coke	No	No								
Bituminous coal	No	No								
Lignite briquettes	No	No								
Peat briquettes	No	No								
Blended fossil fuel briquettes	No	No								
Other fossil fuel	No	No								
Blended biomass and fossil fuel briquettes	No	No								
Other blend of biomass and solid fuel	No	No								

Characteristics when operating with the preferred fuel

Seasonal space heating efficiency η_s [%]	72,0
Energy efficiency index (EEI)	108,5

	Symbol	Value	Unit		
Heat output				Type of heat output/room temperature control (select one)	
Nominal heat output	P_{nom}	10,0	kW	Single-stage heat output, no room temperature control	
Minimum heat output (indicative)	P_{min}	N/A	kW	Two or more manual stages, no room temperature control	
Useful efficiency (NCV as received)				With mechanic thermostat room temperature control	
Useful efficiency at nominal heat output	$\eta_{th, nom}$	81,0	%	With electronic room temperature control	
Useful efficiency at minimum heat output (indicative)	$\eta_{th, min}$	N/A	%	With electronic room temperature control plus day timer	
Auxiliary power consumption				With electronic room temperature control plus week timer	
At nominal heat output	e_{lmax}	N/A	kW	Other control options (multiple selection possible)	
At minimum heat output	e_{lmin}	N/A	kW	Room temperature control, with presence detection	No
In standby mode	e_{lSB}	N/A	kW	Room temperature control, with open window detection	No
Permanent pilot flame power requirement				With distance control option	No
Pilot flame power requirement (if applicable)	P_{pilot}	N/A	kW		



Power range: min./ max per hour [1] Vermogensbereik; min./max. per uur Leistungsbereich; min.max. pro Stunde Plage d'utilisation, puissance min./max. par heure	4-12 kWh
Fuel requirement per hour, min./max. [2] Navul hoeveelheid per uur, min./max. Holzaufgabemenge pro Stunde, min./max. Charge de bois par heure, min./max.	1-5 kg
Weight Gewicht Gewicht Poids	245 kg
Efficiency Rendement Wirkungsgrad Rendement	81%
Energy Efficiency Class Energie Efficiëntie Klasse Energie Effizienz Klasse Classe d'efficacité énergétique	A+ 
Energy Efficiency Index Energie Efficiëntie Index Energie Effizienz Index Index d'efficacité énergétique	108,5
Dust Stof Staub Poussieres fines	31 mg/Nm ³
CO	0.06 %
Information for chimney calculation Informatie voor schoorsteenberekening Information für den Schornsteinfegermeister Information pour le calcul de conduit et de tirage de cheminée	9 kW 8.3 g/s 260 °C 0.06% CO 0.12 mbar
EN 13240 Art.15a B-VG VKF BlmschV. Stufe 2 Flamme Rucola Smoke Control	EZKA/11/041-3a <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>

[1]

The minimum power is required to keep the stove at operating temperature.

Het minimale vermogen is nodig om de haard op bedrijfstemperatuur te houden.

Die minimale Leistung ist notwendig, damit die Betriebstemperatur des Kaminofens aufrechterhalten bleibt.

Une puissance minimum est nécessaire pour maintenir le poêle à une bonne température de fonctionnement.

[2]

At 80% efficiency, 1kg of wood with 15% rest moist, gives of approx. 3,5kW energy.

Bij een rendement van 80%, geeft 1kg stookhout met 15% restvocht, ongeveer 3,5kW energie.

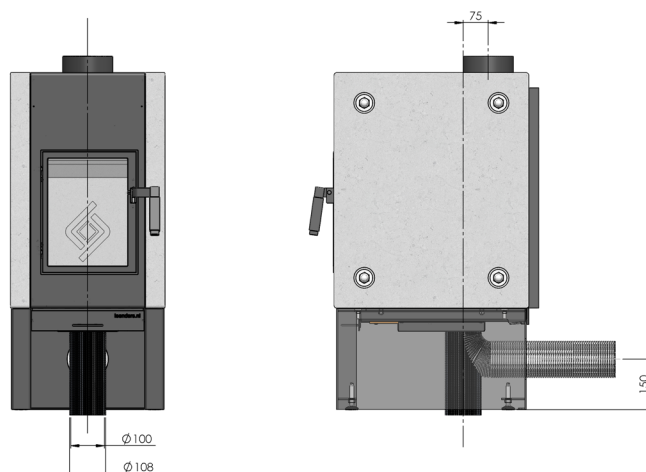
Bei einem Wirkungsgrad von 80%, ergibt 1 kg Holz mit 15% Restfeuchtigkeit etwa 3,5kW Energie.

Avec un rendement de 80%, 1kg de bois avec un taux d'humidité de 15% délivre environ 3,5 kW de énergie.



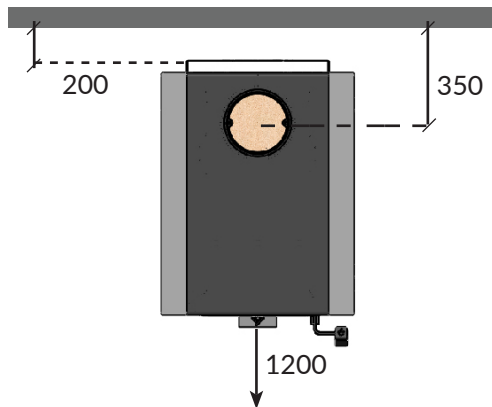
Color variations body Kleurvariaties body Farbvariationen Body Les variations de couleur body	black/antracite zwart/antraciet schwarz/anthrazit noir/anthracite
Color side tiles Kleur zijstenen Farb Seitensteine Couleur réfractaires latérales	black/antracite zwart/antraciet schwarz/anthrazit noires/anthracites
Flue Diameter Diameter afvoer Anschlussdurchmesser Diamètre de conduit	Top + rear Ø150mm Boven + achter Ø150mm Oben + hinten Ø150mm Dessus + arrière Ø150mm
Rotatable top flue Draaibaar bovenafvoer Drehbar mit Anschluss oben Sortie dessus pivotable	-
Rotatable rear flue Draaibaar achterafvoer Drehbar mit Anschluss hinten Sortie arriere pivotable	-
Plus heat storage Plus stenen set Plus Speicherset Ceramiques d'accumultion	16h -> 40 °C
Fresh air supply Verse luchtvoorziening Frischlufztzufuhr Prise d'air	in base: to wall or floor in voet: naar wand of vloer im Fuß: zum Wand oder Boden à pied: par le mur et le sol
Possibility to level foot Voet waterpas te stellen Fuss mit Wasserwaage ausrichten Mise à niveau du pied	<input checked="" type="checkbox"/>

Fresh air supply/verse luchtvoorziening/Frischlufztzufuhr/prise d' air

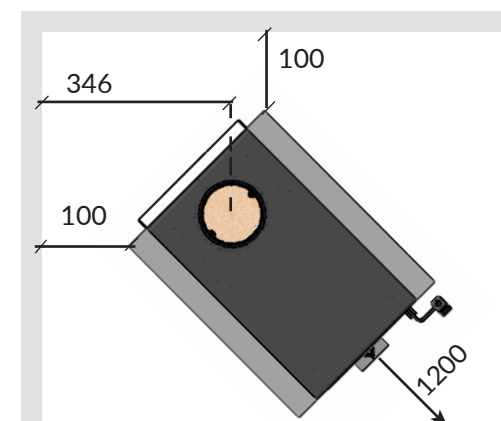
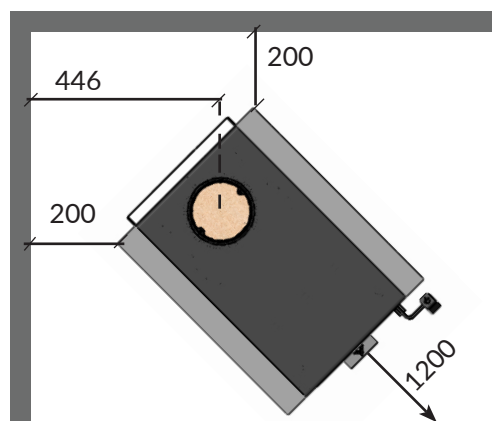
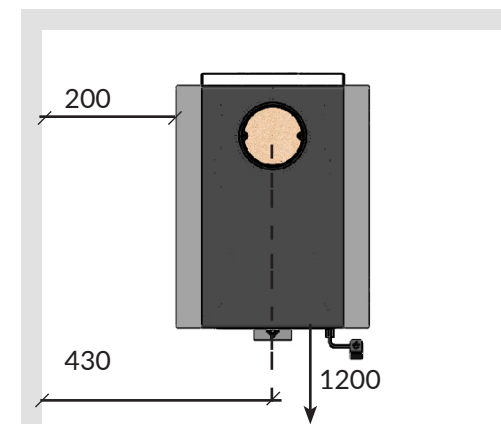
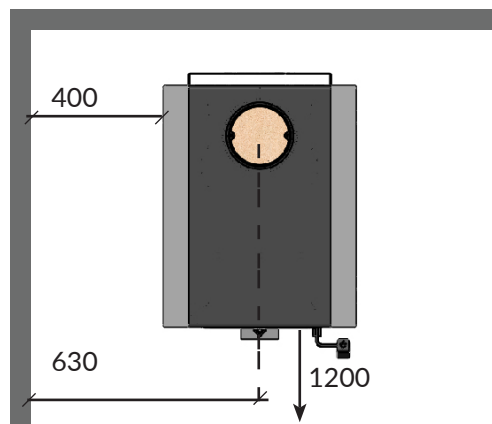
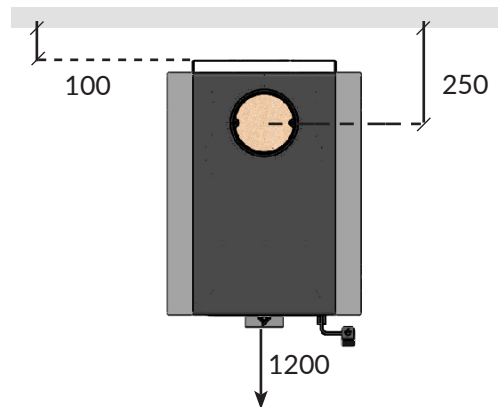


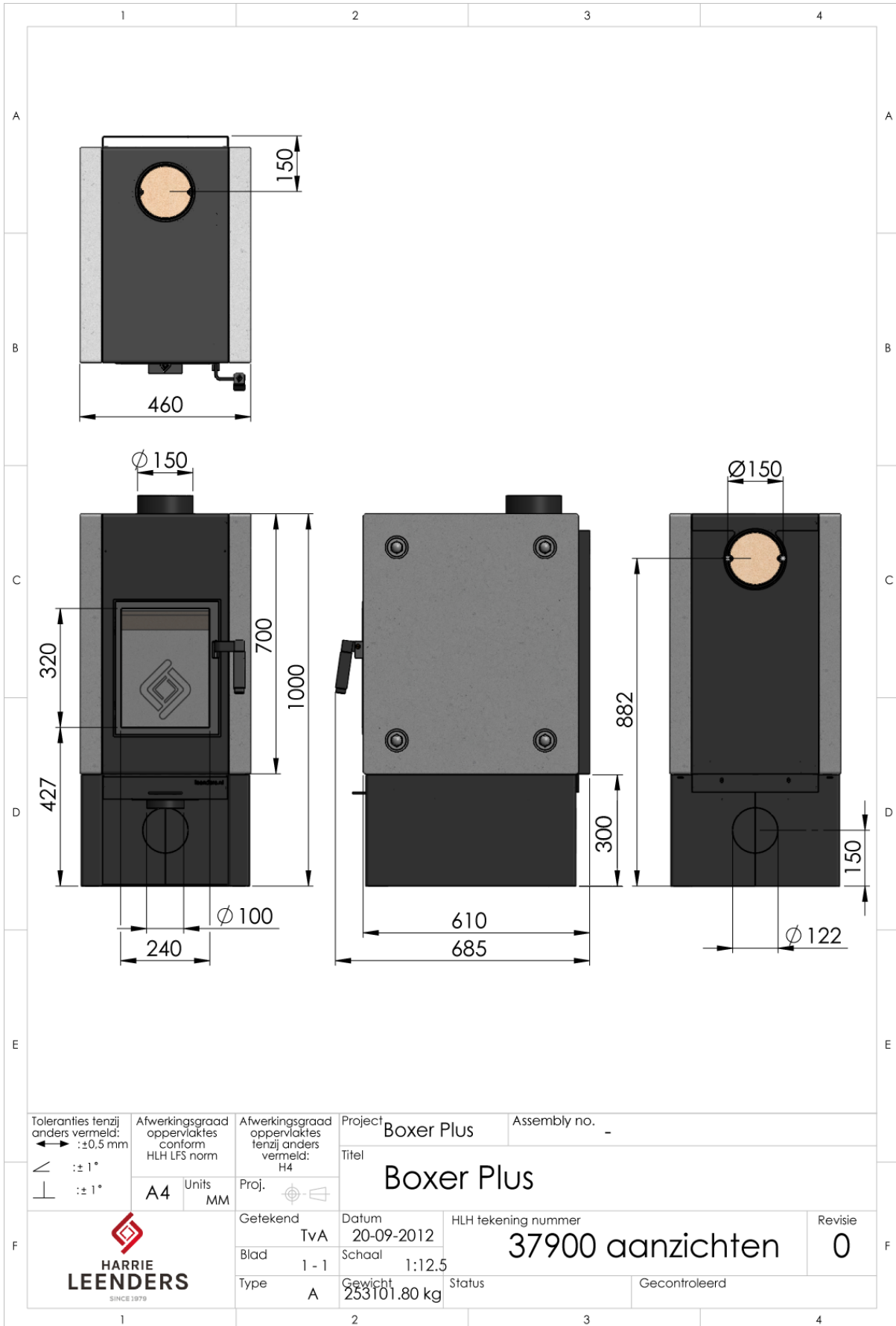


flammable
brandbaar
brennbar
inflammable



nonflammable
onbrandbaar
nicht brennbar
inflammable





Toleranties tenzij anders vermeld: ± 0.5 mm \angle : $\pm 1^\circ$ \perp : $\pm 1^\circ$	Afwerkingsgraad oppervlaktes conform HLH LFS norm A4 Units MM	Afwerkingsgraad oppervlaktes tenzij anders vermeld: H4 Proj.	Project	Boxer Plus	Assembly no.	-			
			Titel		Boxer Plus				
HARRIE LEENDERS SINCE 1979		Getekend	TvA	Datum	20-09-2012	HLH tekening nummer	37900 aanzichten	Revisie	0
		Blad	1 - 1	Schaal	1:12.5				
		Type	A	Gewicht	253101.80 kg	Status	Gecontroleerd		